

We have no choice but to develop our alternative energy reserves

By Bill Johnson

Article Last Updated: 01/06/2008 11:19:34 PM MST

A Jan. 1 Salt Lake Tribune editorial opines that the environmental cost of developing unconventional resources, oil shale and tar sands, is too high, and this oil is best left in the ground. Emerging energy supply problems would argue just the opposite.

The editorial, "Price too high: Weigh all costs of energy from oil shale, tar sands," also incorrectly asserts that the Bush administration is responsible for the Programmatic Environmental Impact Statement that actually was ordered by Congress as part of the Energy Policy Act of 2005.

The world is rapidly approaching its limit for production of conventional petroleum. Our transportation economy runs on liquid fuels made from petroleum, and there are no substitutes for liquid fuels from petroleum other than liquid fuels from tar sands, oil shale and coal.

Renewable sources (hydroelectric, wind, solar-voltaic) make electricity, not fuels, and fuels from biomass provide virtually no new net energy. Ultimately, we have no choice but to turn to unconventional fuels, as the oil sands industry in Alberta, Canada, has already proven.

There are many myths about oil shale and tar sands, some of which are perpetuated in the editorial opinion. Contrary to the suggestion of negative energy productivity, production by mining and surface processing produces at least 7 British thermal units of fuel energy for each Btu consumed. Even conventional petroleum today is no better than about 9 to 1.

The editorial claims these resources are "proven environmental busters." Yet, prior tests and demonstration facilities in the United States have been reclaimed to regulatory standards, with no reported legacy problems. Current environmental laws and permitting processes will not allow for unacceptable impacts to the environment.

Additionally, the high concentration of oil (U.S. oil shale is the most concentrated hydrocarbon accumulation on Earth) means there are fewer acres disturbed. Certain locations in Colorado may yield as much as 1.5 million barrels of oil from a single acre. One would need to cover more than 3,000 acres of land with solar panels for 25 years to produce as much energy (both resources calculated on an electricity basis) to equal the productivity of that one acre.

The high-energy density of oil shale means it can produce more energy and more wealth for the state, per acre of impact, than any other energy choice.

Nevertheless, the real issue is this: Whether political leaders or governmental experts want to admit it, the world is heading for a crisis in energy supply. The sooner we plan for this eventuality, which is what the Bureau of Land Management's Programmatic Environmental Impact Statement is all about, the better we can manage the development of unconventional resources, for the economic and energy security of our citizens.

We should be happy we have these vast resources available, because as a nation that imports two-thirds of our oil needs, without oil shale, tar sands and coal, we would be helpless to counter shortfalls in supply as the world competes for the remaining petroleum resources. We can plan, or we can react. Those are our choices.

* BILL JOHNSON is a member of the Congressional Unconventional Fuels Task Force (co-chaired by Gov. Jon Huntsman). He lives in Vernal.

The world is heading for a crisis in energy supply. The sooner we plan for this eventuality the better we can manage the development of unconventional resources, for the economic and energy security of our citizens.